

### **REMARKS**

Reconsideration and allowance in view of the foregoing amendment and the following remarks are respectfully requested. Claims 1 and 28 are amended without prejudice or disclaimer.

#### **Rejection of Claims 1-3, 7, 9-13, 15-30, 34-40, 42-54 and 56-57 Under 35 U.S.C. §102(e) and 103(a)**

The Office Action rejects claims 1-3, 7, 9-13, 15-30, 34-40, 42-54 and 56-57 under 35 U.S.C. §102(e) as anticipated by or, in the alternative, 35 U.S.C. §103(a) as obvious over Beyda et al.(U.S. Patent No. 6,487,777) ("Beyda et al."). Applicants respectfully traverse this rejection and submit that the pending claims are not anticipated by or rendered obvious over Beyda et al. Applicants note that although we traverse this rejection, we have also amended independent claims 1 and 28 to further refine the invention and to add some characteristics associated with the verbal and non-verbal input which further distinguish the claims from Beyda et al.

Applicants thank the Examiner for the non-final Office Action and request a Notice of Allowance based on the arguments and amendments herein.

Applicants first respectfully note that the Office Action on page 3 states that Beyda et al. discloses the user is able "to perform verbal and non-verbal input within the same communication" citing column 8, lines 29-37 (emphasis added). Applicants respectfully urge that it appears that the Examiner has either not read or ignored a core aspect of our argument in our January 10, 2007 response. Notably, on page 2-4, Applicants pointed out and explained clearly that Beyda et al. fail to teach that the user is able to perform verbal and non-verbal input within the same communication. It is clear that column 8, lines 29-37 of Beyda et al. simply teach that the user may either provide verbal input or provide non-verbal input through using the keypad. The Office Action simply fails to address our particular argument, but rather states on page 3 just the conclusory statement that Beyda et al. does disclose that the user is able to use

verbal and non-verbal input within the same communication. Applicants maintain their position in this regard, but nevertheless have amended claims 1 and 28 to further refine the invention. Claim 1 is amended to recite "wherein the verbal and non-verbal input each convey different information and are associated with a coordinated message to achieve an appropriate response." This clearly distinguishes from Beyda et al. inasmuch as the verbal input (the user saying "back, one") and the non-verbal input (the user pressing \*, 1) each clearly convey the same information. This is true as well with the alternate teaching in column 8, in which the user desires to turn backwards a predetermined number of levels according to the user input. In this regard, the user can provide non-verbal input such as pressing (\*) followed by 2 or may provide verbal input by saying "back, 2" in order to return from prompt level 3 up to prompt level 1. Support in the specification is found for the amendment on page 6 in which different stimuli of verbal and non-verbal input may be provided such that to elicit an appropriate machine response that depends not only on the spoken input but upon the state of the environment. Applicants would respectfully request either a non-final Office Action which explains why Beyda et al. teaches the user being able to perform verbal and non-verbal input or a Notice of Allowance in view of the arguments and amendments set forth herein.

Applicants respectfully submit that claim 1 is patentable and in condition for allowance based on the current and previous arguments as well as amendments set forth herein.

Applicants also submit that inasmuch as the parent claim is allowable, that claims 2-3, 7, 9-13, 15-27 and 56 are also patentable and in condition for allowance.

Claim 28 recites an automated routing system that automatically routes a user's request based on an automated task classification decision. This claim is amended in a similar manner to claim 1 discussed above. Accordingly, Applicants respectfully submit that claim 28 is patentable and in condition for allowance, as well as dependent claims 29-30, 34, 36-40, 42-54 and 57.

The above arguments also apply to many of the other dependent claims. For example, claim 2 recites wherein the meaningful phrases are expressed in a multimodal form. The Office Action asserts that column 8, lines 29-37, reads on this limitation, but Applicants respectfully submit that being able to provide one input or the other input without there being any cross channel associations between the different stimuli does not render the teachings of Beyda et al. as being "multimodal". See specification, page 6, lines 1-2. In other words, the definition of multimodal requires a cross channel association between the different stimuli which is certainly not taught in Beyda et al.

There are further differences between several dependent claims and the teachings of Beyda et al. For example, claim 17 recites wherein the association between the plurality of meaningful phrases and the predetermined set of task objectives is based, at least partly, on a measure of usefulness of one of the plurality of meaningful phrases to a specified one of the predetermined task objectives. The Office Action asserts that performing the action is 100% useful and thus columns 7- 10 teach this limitation. Applicants respectfully submit that while performing the action may be 100% useful, there is simply no teaching regarding an association between the plurality of meaningful phrases and the predetermined task objectives being based at least in part on a measure of usefulness of one of the plurality of meaningful phrases to a specified one of the predetermined task objectives. There is simply numerous limitations within claim 17 that are absent from the teachings of Beyda et al. For example, in the disclosure in column 7 the cited portion in columns 7-10, Beyda et al. simply teach basic user interaction such as the user being able to select a # key or \* key or being about to speak and say "next" or "back, 2" and maneuver around a menu system.

Applicants can find no place in the teachings of Beyda et al. regarding the identification or use of a measure of usefulness of one of the plurality of meaningful phrases that are in user

verbal and non-verbal input to a specified one of the predetermined task objectives.

Accordingly, Applicants respectfully submit that for this additional reason that claim 17 is patentable and in condition for allowance. Similarly, the claims that flow from claim 17 add further limitations that add additional features not taught by Beyda et al.

For example, claim 18 recites wherein the usefulness measure is a salience measure. Again, the Office Action cites column 7, lines 13-31 and column 8, lines 29-37, without any discussion regarding how these particular portions of Beyda et al. actually teach anything regarding a salience measure. Applicants respectfully submit that inasmuch as these portions of Beyda et al. fail to teach or suggest anything regarding a salience measure being associated with a usefulness measure of one of the plurality of meaningful phrases to a specified one of the predetermined task objectives, that claim 18 is certainly patentable and in condition for allowance.

Claim 19 depends on claim 18 and further refines the definition of the salience measure as being represented as a conditional probability of the task objective being suggested given an appearance of one of the plurality of meaningful phrases in the input communication, wherein the conditional probability is a highest value in a distribution of conditional probabilities over the set of predetermined task objectives. The Office Action asserts on page 6 that when a phrase is understood it is 100% probable of one of the many task objectives. Applicants respectfully submit that this simplified analysis which simply discusses that a task is performed when input is understood cannot provide sufficient disclosure within Beyda et al. to teach the very detailed limitation regarding the salience measure as it is recited in claim 19. In other words, Applicants respectfully submit that because the probability is 100% that a particular task is performed by the system when a phrase is understood, that does not provide any disclosure regarding the particular salience measure and its representation as is recited in claim 19.

Claim 20 depends on claim 18 and discusses wherein the plurality of meaningful phrases has a salience measure that exceeds a predetermined threshold. Again, the Office Action cites column 7, lines 13-31 and column 8, lines 29-37. Applicants respectfully submit that there is no discussion in these columns regarding a salience measure and thus, it is unknown within the reference whether there is a 100% salience measure that exceeds a matched threshold when an action is performed. Accordingly, the Office Action's analysis is sorely lacking.

Similarly, the measure of commonality with a language of the meaningful phrases as being associated with the meaningful phrases and the predetermined set of task objectives being based on in part on the measure of commonality. Applicants respectfully submit that this is not taught in columns 7 and 8. Again, Applicants note that just because the only example used in Beyda et al. relates to the English language in its prompts and interaction with the user, Applicants respectfully submit that certainly Beyda et al. fail to teach anything regarding establishing a measure of commonality within a language of the meaningful languages. Accordingly, Applicants submit that claim 21 is patentable and in condition for allowance. Similarly, claims 22 and 23 each further refine the definition of the measure commonality and Applicants submit that columns 7 and 8 each fail to teach anything regarding these particular refinements given that the basic teachings of these columns only relate to high level user interaction of either pressing a few keys or speaking very simple words. Accordingly, Applicants submit that these claims are patentable and in condition for allowance.

Regarding claim 25, Applicants note that page 7 of the Office Action only mentions that "Beyda et al. teaches the automated task classification system of claim 1, wherein the input communication from the user represents a request for at least one of the set of predetermined task objectives." There is no place in Beyda et al. that is cited for teachings this particular limitation on the input communication from the user. Applicants would therefore take this lack of any

citation to teachings in Beyda et al. as a concession that this claim is patentable. Accordingly, Applicants respectfully request a Notice of Allowance or a citation and discussion regarding the particular teachings within Beyda et al. "wherein the input communication from the user represents a request for at least one of a set of predetermined task objectives."

Regarding claim 27, Applicants respectfully submit that the discussion above regarding how Beyda et al. fail to teach that the input communication is both verbal input and non-verbal input and thus, respectfully submit that claim 27 is patentable and in condition for allowance inasmuch as there is no teaching in columns 7-10 of Beyda et al. wherein the verbal and non-verbal input are directed to one of the set of predetermined task objectives and there is no teaching in the reference regarding how each of the verbal input and non-verbal input are labeled with the one task objective to which it is directed.

Applicants submit that claims 28-30, 34-40, 42-54 and 57 are patentable for some of the reasons set forth above regarding claim 1 and its dependent claims.

Applicants thank the Examiner for providing the detailed Office Action and respectfully requests a Notice of Allowance in the present case.

**CONCLUSION**

Having addressed all rejections and objections, Applicants respectfully submit that the subject application is in condition for allowance and a Notice to that effect is earnestly solicited. If necessary, the Commissioner for Patents is authorized to charge or credit the **Novak, Druce & Quigg, LLP, Account No. 14-1437** for any deficiency or overpayment.

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